

Bogota, Colombia.

INTERNATIONAL NARCOTICS AND LAW ENFORCEMENT – I.N.L.

### PROJECT: Office and Classroom Equipment System – for Maritime Training Academy Building

<u>LOCATION</u>: COLNAV Coast Guard Academy – Cartagena, Colombia Number of Pages: 23

Request No.

**Date :** March 13, 2015

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### 1. GENERAL TERMS OF REFERENCE

The COLNAV CG (Colombian Coast Guard Maritime Training Academy) academy in Cartagena, Colombia, requires an Integrated Office Equipment and Data System; in the performance of this contract the contractor shall provide all services to include but no limited to all equipment, labor, accommodation, food, supervision, management, VAT, taxes, and other inherent to the proponent necessary to supply, transport, furnish, install, program, integrate and configure a complete and functional Integrated Office Equipment and Data System in full operating capacity, including training on the equipment and devices installed, and technical service by a qualified engineer.

The contractor shall include in the propose a work description to be done and applicable options if it is necessary, including catalogs, test material or any other information required in the following paragraphs.

The contractor shall be responsible for the safety of the information contained on technical specifications, drawings and documents provided by the US Government, ensuring that copies will not be distributed to any other people.

### 1.1. General Description of the Project

The Integrated Office Equipment and Data System shall consist of new equipment to include computers, digital screens, sound amplifiers system, server, cameras, power supplies, DVR Equipment, Video matrix controllers, Surge suppressors, ELECTRIC CURTAIN FOR PROJECTION, ROOM MANAGEMENT SOFTWARE NETSUPPORT, WIRELESS AUDIO CONFERENCE SYSTEM, printers, VIDEO CONFERENCE SYSTEM, PAPER SHREDER, PORTABLE VIDEO PROJECTIOR, PROJECTION SCREEN, TELEVISION CLOSED CIRCUIT CCTV. wiring and all the necessary components for a complete functional system.

Attachment 1 shows the technical specifications required of the devices.

This contract excludes the infrastructure such as conduit and boxes to wire the devices this infrastructure and the power requirements such as panel boards and circuit breakers that feed the devices. Any additional requirements or missing infrastructure issues shall be included in the proposal to be notified to the INL contracting officer.

### 1.2. Special Contract Requirements

#### 1.2.1. Site Specific Conditions:

The Contractor shall specify the time required to comply with the object of this contract, bearing in mind the contingency calendar days and works run-time zone to work, the weather conditions and the time of the year.



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The Contractor shall bear in mind the time that the Coast Guard personnel will take to get access permissions to the Naval Academy (5 business days estimated), and the time that INL shall take to review the delivery and installation of the equipment (2 days estimated for the delivery each report) and the time required by the Contractor to make the corrections.

All contractor employees who will be working on site must be wearing a company uniform and/or company ID badge that makes them readily identifiable as contractor employees.

### 1.2.2. Safety, social security and occupational health

Is the responsibility and obligation of the Contractor to ensure that all his staff comply with the actual legal provisions given by the Labor Ministry for safety and occupational health for all activities to be developed on site that may affect his staff or other people directly or indirectly.

The Contractor to whom the project is awarded shall ensure that all the employees and subcontractors working in the project are registered and payments up to date in a social security system that includes E.P.S. (entity) (Healthcare institution) and A.R.L. (risk professional administrator). At the same time the Contractor shall be responsible for any damage or harm arising of such activity. The Contractor shall deliver at the beginning of the service agreement copies of the payments done to those entities to the INL Contract administrator.

#### 1.2.3. Minimum Standards

The Contractor shall consider the following minimum standards:

- a) Before beginning works and in order to approve access to the workplace the Contractor shall deliver a detail list of his staff with full names, ID numbers, place and date of birth, address and legal past certificate. The Embassy and the Colombian Navy Coast Guard reserves the right of admission or rejection of the Contractor's staff for reasons of security and/or quality of work.
- b) All the working staff on site shall be dress accordantly and special items in each activity requires as masks, earplugs, Safety Harness, etc. which shall mandatory within the work place. They shall also carry a company badge with names, ID number, position, subcontractor, and recent photo. If the Contractor does not comply with these requirements, this will result in the temporary suspension of the work until the Contractor meet with the specified standards.
- c) All vehicles and equipment to access the Coast Guard Maritime Training Academy facilities should be written down in a list in advance to be verified and in order to give them the access permission. This listing shall include type of vehicle, license plate and the name, ID number and phone number of the driver. The Contractor shall bearing in mind how much time does the vehicle and the personnel take to enter and leave the base facilities. The safety of the vehicles and the machinery is the responsibility of the Contractor.
- d) The areas where the surveys shall be carried out or that are considered accidents risk areas shall be demarcated with fences or preventive signals, as well as signaling that indicates the use of protective elements.
- e) The Contractor shall keep clean all the work sites by avoiding the accumulation of refuse wastes which will be transferred to approved sites or garbage areas outside the Coast Guard Maritime Training Academy facilities. Burning waste materials on site shall not be allowed. Cleaning will take place at the end of each day.



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- f) Work hours at Coast Guard Maritime Training Academy facilities are Monday thru Saturday from 8 a.m. to 5 p.m. However before quoting a price and initiating the project, the Contractor shall verify the work hours with the Coast Guard authorities. Likewise, should additional time be required during the course of the work, permission to this effect shall be requested in advance for approval to the Coast Guard authorities. No work will be permitted during night hours unless approved in advance by the Coast Guard authorities.
- g) The Contractor is responsible for food and accommodation of his staff outside the Coast Guard premises. The Contractor is also responsible for the necessary transportation of his staff.
- h) The Contractor shall adopt all the security measures for the control of those factors that may affect the health and well-being of the community.
- i) The Contractor who the contract is awarded shall contact INL maritime supervisor prior to getting to the site for any clarification needed in order to perform the work as planned. The numbers to contact in Bogota are: 2752284 and mobile phone 321 3939982. The list of personnel that shall go to the site shall be needed to be submitted with two days in anticipation in order to send it to the Colombian Navy (COLNAV) Coast Guard and inform the Coast Guard of your arrival.

### 1.2.4. Project Schedule

The contractor shall complete the works in its totality in a time frame that shall not exceed fifteen (15) days, starting from the day that the contractor receives the purchase order. The contractor shall include in his proposal the time required to complete the works bearing in mind contingency days, the time zone, the atmospheric conditions and the season of the year.

The Contractor may make partial deliveries of the equipment according to the availability and existence of inventory.

The contractor shall bearing in mind the time it takes for the Coast Guard personnel to process security clearances as well as the time it takes for INL to review the delivery and installation of equipment (2 days estimated for the delivery each report) and the time required by the Contractor to make the corrections.

### 1.2.5. Property intellectual and reserve levels and designs

In accordance with the rules on intellectual property and copyright, is understandable that the drawings, calculations and designs performed by the Contractor under this contract belong to the Government of the United States of America, and only charged by this work order. The Embassy may use them at its discretion, partially or totally for future projects, without requiring approval by the designer or contractor.

The Contractor shall be required as well to take all necessary measures to maintain the reserve and confidentiality of the information, documents and other matters relating to the work, and may not make reproductions of this information or use partially or totally without the authorization of the Embassy. Any breach to this obligation shall be considered by the Contracting as a serious breach to its obligations, which may lead to the termination of the contract, without prejudice to the other legal actions to be taken against him, including those intended to compensate the harm that might cause this act.



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#### 1.2.6. Quality of the work

The Contractor shall be responsible for the good quality the works executed by him, their workers or sub-Contractors and therefore for any damage, defect, repair or works poorly executed, or poorly completed, will be fixed and assumed by the Contractor without any additional cost to the Embassy.

The quality shall be based on the technical specifications of the project and to those belonging to the corresponding Colombian standards for each of activity. It shall be clear that in the case of absence of the Colombian standards for a specific case, the corresponding codes of the United States shall govern for the specific activity.

The acceptance from the Embassy of the equipment, drawings, and/or works does not relieve the Contractor from complying with the codes and rules for both design and installation.

If there are jobs that are poorly executed by imputed causes of the Contractor and a review is deemed necessary, the work as a whole, the staff of the Contractor shall go back to the workplace, and the costs of transportation, accommodation, food, working hours and other expenditure involved shall be assumed by the Contractor and shall be implemented as soon as possible.

### 2. TECHNICAL TERMS OF REFERENCE

#### 2.1. Relevant Codes and Standards:

NORMA TECNICA COLOMBIA
RETIE
ANSI/IEEE
TIA
BICSI
CONSUMER ELECTRONICS ASSOCIATION (CEA)
ELECTRONIC COMPONENTS ASSOCIATION (ECA)
ECA EIA/ECA 310 (2005) Cabinets, Racks, Panels, and Associated Equipment
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

Where two or more codes provide conflicting information the strongest requirement will prevail.

### 2.2. Submittals

#### 2.2.1. Proposal Submittals

- 1. The Contractor shall include in his proposal the following documents:
- 2. Catalogues for all Equipment.
- 3. Proposed Schematic Diagram depicting locations, wiring and devices.
- 4. Resumes of Engineers and technicians that will perform the job demonstrating pertinent experience in relation to the project.
- 5. Schedule for the Project (Gant Chart).
- 6. Description of the work to run and the options raised (only if applicable), catalogs or testing materials.



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#### 2.2.2. Execution Submittals

Prior to beginning works, the Contractor shall submit a detail schedule of the work. The Contractor shall provide Catalogues, and Technical Specifications as well as certifications for all material and equipment.

The Contractor shall provide a document describing the executed works, number of persons working, budget, problems found and recommendations.

The Contractor shall be responsible of the specifications, drawings, etc. delivered to him by the US government, which shall be under his strictly supervision in order not make unauthorized copies to persons other than the Contractor.

The contractor shall prepare and send to the COR a weekly report via email specifying the activities that took place during the week, the work milestones, the number of workers on site, the executed budget any issues encountered and recommendations.

For the final delivery of the project and after the work has been completed and approved by the contracting office and the end user, the following documentation shall be delivered in two (2) exact copies:

- a) Final report of the installation and commissioning of the system in a 3 punch binder (original and copy) including:
  - Description of work executed, location, detailing installation methods and procedures.
  - Drawings in letter size paper in AutoCAD® format
  - Calculations, tests and acceptance plan for final delivery, training and commissioning of the system.
  - Catalogues, Technical Data Sheets and Schematic Diagrams.
  - Operation and Maintenance Manuals.
  - Warranties.
- b) Two CD copies with the final report and drawings
- c) Contractor clearance certificate in the INL format and signed by the legal representative indicating that all payments to suppliers, employees and sub-contractors has been done.
- d) Coast Guard Clearance certificate signed by the Director of the Coast Guard Maritime Training Academy certifying that the work is completed, that all elements borrowed by the Coast Guard has been delivered, that the Coast Guard cafeteria has all payments certificates, etc.
- e) Payment of invoice indicating the number of the order and discriminated against VAT.
- f) Closing documentation to process payment signed by the legal representative work receipt

#### 2.3. Technical Parameters

a) The Contractor shall not to damage pipes, boxes, wiring, poles, hoses, wells or other elements or structures existing in the work area or adjacent to it. In case of the installation of the equipment



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requires additional works in the infrastructure, the Contractor shall submit to the CO a propose to make the installations in adequate form, with necessary protections.

- b) Leave areas as they were. All the perforations, probes, etc. should be properly closed.
- c) The areas, equipment and items from the work areas or nearby areas shall be protected to prevent damage or deterioration thereof. If there is any repair or change due to abuse or negligence from the Contractor or their staff, the Contractor shall assume cost. The Contractor must dismount all preliminary installations before the final delivery, disposing all debris and waste materials.
- d) The Contractor upon completion of the works shall perform the necessary tests to confirm all equipment and systems is working properly as per the approved Testing and Acceptance Plan.
- e) The contractor shall provide training for Coast Guard personnel as per the approved Testing and Acceptance Plan.

### 2.4. Training

The Contractor shall include in his quotation the provision of training services in the supplied equipment and systems (hardware) and the operational solution (software), referenced on this document (SOW). The formal training should be given on the Coast Guard Maritime Training Academy in Cartagena, Colombia. The training must include a workshop materials, projector and a qualified and experienced instructor led 20 people for two days. The dates and times should be discussed after the contract award. The contractor shall provide all necessary documentation to operate and maintain equipment and software included in this SOW.

### 2.5. Transportation

The Contractor shall include in his quotation the transportation of all equipment and systems to Cartagena to be installed in the Coast Guard Maritime Training Academy.

### 2.6. Technical Specifications

The following are the main characteristics of the work to be performed as described:

### 2.6.1. Work general Description:

The following are the main characteristics of the work to be executed at the Coast Guard Maritime Training Academy facilities located in Cartagena, Bolivar. The work includes, but is not limited to supply equipment, transportation, install, integrate and commission of an Integrated Office Equipment and Data System composed by computers, digital screens, server, Closed Circuit television (CCTV) system. The cameras of the CCTV system shall use a Low voltage Power Supply and use UTP wiring for the video data signal via IP protocol with PoE All software licenses for the equipment shall be included. It is responsibility of the Contractor to verify the accuracy of the drawings and other document supplied by the US Embassy.

Important: The Contractor MUST attach catalogs, data sheets and manufacturer certifications on equipment to be used supplied and installed under the execution of the contract, without them, the proposal will not be considered for the award process. The proposed project does not include civil works,



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for this reason, any extra work related to this issue should be coordinated directly with the COLNAV Coast Guard.

All works shall be performed following the specifications as per 2.1 relevant codes and standards.

Operating Ambient Temperatures for all Equipment shall be:

Temp: -10°C to 50°C

Humidity: 0% to 95% Relative Humidity

### 2.6.2. Detailed Information:

The Contractor shall quote for supply and installation of the items described in the Excel board in Annex 1 for a fully functional Integrated Office Equipment and Data System (equipment with equal or superior specifications may be proposed); the items listed in the attachment are not inclusive of all equipment and accessories for a complete system, the contractor shall provide and install all necessary equipment and accessories for a fully functional system.



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1	PORTABLE COMPUTER. Suggested reference: Notebook Touch 140n028la.  Specifications Operating System Windows 8064. Processor family Intel® Core ™ i5- 4200U (1.6 GHz, 3 MB cache, 2 cores) Memory, standard 8 GB DDR3L. Touch HD  BrightView LED MonitorScreen 14 diagonally (1366 x 768) Graphics Intel HD 4400  Weight 1.98 kg. Warranty 1 year	2	EA - each
2	DESKTOP COMPUTER. Suggested reference: Processor Intel Core I5-4210M HM86. 2.6GHz 4GB - Windows OS 8.1 pro Panel with Anti-Flicker LED Multi-Touch 10 points - Screen Size 19.5 "- Resolution 1600 x 900 - Chipset Intel ® Express Chipset HM86 - Graphic Super Multi Integrated Intel HD Graphics 4600 - SO DDR3L Memory -DIMM 4 GB * 2 slots - Hard disk SATA II 2.5 "- 500GB - Wireless 802.11 b / g / n - WiFi - Blue Tooth - card Reader 3 in 1 (SD, MMC, MS) - Speaker 2 x 3W with Creative Sound Blaster ™ Film - rear Connections Mic in x1, x1 headphone output, USB3.0 x 4 HDMI x1, RJ45x1, DC Jack - USB2.0x2 lateral connections (including Super Charger x1) DVD cards- HD Webcam - Dimensions: 495mm x 32.3mm x 376.5mm.2.6GHz 4GB hm86 Windows OS 8.1 pro Panel with Anti-Flicker LED Multi-Touch 10 points - Screen Size 19.5 "- Resolution 1600 x 900 - Chipset Intel ® Express Chipset hm86 - Graphic Super Multi Integrated Intel HD Graphics 4600 - SO DDR3L Memory -DIMM 4 GB * 2 slots - Hard disk SATA II 2.5 "- 500GB - Wireless 802.11 b / g / n - WiFi - Blue Tooth - card Reader 3 in 1 (SD, MMC, MS) - Speaker 2 x 3W with Creative Sound Blaster ™ Film - rear Connections Mic in x1, x1 headphone output, USB3.0 x 4 HDMI x1, RJ45x1, DC Jack - USB2.0x2 lateral connections (including Super Charger x1) DVD cards- HD Webcam - Dimensions: 495mm x 32.3mm x 376.5mm.	53	EA - each
3	INTERACTIVE DIGITAL LED DISPLAY 90 INCH: General Features: multi touch system for video presentation - Size 90 inch screen MONITOR - TV - SLATE - 2D and 3D image - infrared sensors that detect fingers or objects for operation Supports connectivity with Windows, Mac and Linux OS Software features:  -The Interactive system must be able to handle and import documents or files in formats ppt, xls, pdf, html, xls, doc, jpeg, bmp, txt, jpeg, etc System whiteboard, writing tool, shapes colors Compatible with the Windows operating system in any application (PowerPoint, Word, Excel, Outlook, all the applications installed on the PC), which can open, edit, save, send or record -Function Writing: providing three different writing tools such as pencils, pen, brush and highlightersFunction Lupa: Four different amplification functions and shortcuts. One of the keys to screen magnification, optional display of any region. Screen Captures: the hotkey you can capture all or part of the image on the screen and comment without modifying the original text. Physical characteristics: Panel Display Type: LCD RETROLED Screen Protection: Glass, 4mm antireflective	1	EA - each



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Backlight type: LED Matrix-Full

Maximum resolution: 1920x1080, FullHD

Aspect Ratio: 16x9

Dynamic Contrast Ratio: 8, 000,000: 1

Update Panel Change: 120Hz DISTRIBUTION SYSTEM

Analog: NTSC - Digital: ATSC / QAM

**VIDEO** 

Compatibility PC signal: VGA, SVGA, XGA, WXGA, SXGA, UXGA Optical Picture Control (OPC): Yes. Wall mounting adjustment: Yes

CONNECTIVITY

Type: 3D active - Ethernet: Yes - Built-in Wireless: Built-In (801.11 a / b / g / n) - IP Control: Yes - Remote (iOS / Android) Control: Yes - Web Browser: Yes - Web + Split

Screen TV: Yes

Skype: Yes - DLNA Certified ®: Yes - MHL Compatible: Yes - RS-232C: 1 - PC (1-15 pin D-sub): 1 Total USB (s): 4 - USB Function: Photo / Music / video Update Software - Total HDMI input (s) 4 - RF (Antenna / Cable): 1 - component Video input (s): 1 - composite Video Input (s): 1 - Audio Input (s): 1 - audio Output (s): 1 - Mic / headphone: yes

CPU: Intel Core i5 4570T (dual-core, 2.9 GHz) (Up to 3.6 GHz, Turbo) 500gb - 4gb ram-Video Out 4k, Windows 8 Pro

Parameters Touch. Objects of Sensor: Finger, pen or any object for writing or presentation- Sensor Size: diameter ≥ 5 mm - Resolution: 4096 \* 4096 - Response time: The first point (click): 8 ms, continuous (in writing): unique multi-touch touch: - touch Model

POWER Power Supply (Voltage, Hz): AC 120 V, 60 Hz Dimensions (W x H x D): 2055mm x 1197mm x 122mm

Wall mounting fixed



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4	INTERACTIVE DIGITAL LED DISPLAY 80 INCH: General Features: multi touch system for presentation - Size 80 inch screen MONITOR - TV - SLATE - infrared sensors that detect fingers or objects for operation 300 dots / second speed of response - Supports connectivity with Windows, Mac and Linux OS. CPU: Intel Core is 4570T (dual-core, 2.9 GHz) (Up to 3.6 GHz, Turbo) 500gb - 4gb ram- Video Out 4k, Windows 8 Pro.Software features: The Interactive system can handle and import documents or files in formats ppt, xls, pdf, html, xls, doc, jpeg, bmp, txt, jpeg, etc-System whiteboard, writing tool, shapes colorsCompatible with the Windows operating system in any application (PowerPoint, Word, Excel, Outlook, all the applications installed on the PC), which can open, edit, save, send or recordFunction Writing: providing three different writing tools such as pencils, pen, brush and highlighters-Function Lupa: Four different amplification functions and shortcuts. One of the keys to screen magnification, optional display of any regionScreen Captures: the hotkey you can capture all or part of the image on the screen and comment without modifying the original text-Drawing Function: Provide lines, rectangles, circles, wavy and tools Shortcut drawingFunction Projection: image capture device can be written with the installed equipment, video capture, recording and display in real time.Physical Features:Panel Display Type: LCD RETROLED - Screen Protection: Glass, 4mm antireflection - Backlight type: LED-Matrix Full - Maximum Resolution: 1920x1080 FullHD - Aspect Ratio: 16x 9 - Dynamic Contrast Ratio: 4, 000,000: 1 - Update Panel Change: 120Hz. BROADCAST SYSTEM - Analog: NTSC - Digital: ATSC / QAMVIDEO - Compatibility with PC signal: VGA, SVGA, XGA, WXGA, SXGA, UXGA - Optical Picture Control (OPC): Yes Wall mounting adjustment: YesCONNECTIVITY - 2D type active. Ethernet: Yes - Built-in Wireless: Built-in (801.11 a / b / g / n) - IP Control: Yes - Remote (iOS / Android) Control: Yes - Web Browser: Yes - Web + Split Screen TV:	5	EA - each
5	INTERACTIVE DIGITAL LED DISPLAY 70 INCH: General Features: Touch-screen system for presentation - Size 70-inch diagonal screen MONITOR - TV - SLATE - Central Processing Unit (CPU) integrated - Touch and Multitouch - 2D and 3D image. Several people can work while on the screen - infrared sensors that detect fingers or video	1	EA - ach



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# EMBASSY OF THE UNITED STATES

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objects for operation 300dots / second speed of response - Supports connectivity with Windows, Mac and Linux OSSoftware features:- Software tools: pencil, highlighter, line thickness and color, partial or full draft mode, white board, drawing geometric figures, enfocdo in various forms, rules or guidelines, hidden area of the screen, screenshot images, video capture actions, image viewer with auomaico sending a mailing list and auto print, on-screen keyboard, right-click smoothing lineRecord Synchronized with the image of the teacher, voice, performance and content of handwritten comments; Control PC software applications interactively Allow make handwritten notes on any system or application program (internet, Word, Excel, PowerPoint) delete, archive, print or mail: permission for the captured images can be archived, deleted, printed and can be sent to different email recipients OS: Windows xP, Windows Vista, Windows 7, Linux-Allows Import files in formats ppt, xls, pdf, html, xls, doc, jpeg, bmp, txt, jpeg, etc- Writing tool for off-board applications. Record file in various formats and can open previously saved files Edit images and photostool Screen recording tools, hyperlinks to web pages, audio and video recording in avi format. Record in html, pdf, Word,, direct internet connection.Physical Features:Panel Display Type: LEDScreen Protection: Tempered glass, 4mm antireflectiveBacklight type: LED Matrix-FullMaximum resolution: 1920x1080 Full HDAspect Ratio: 16x 9Dynamic Contrast Ratio: 4, 000,000: 1Update Panel Change: 120HzBROADCAST SYSTEMAnalog: NTSC - Digital: ATSC / QAMVIDEO optical image controlCONNECTIVITY2D active type - Ethernet: Yes - Built-in Wireless: Built-in (801.11 a / b / g / n) Web Browser: Yes - Skype: Yes - DLNA Certified *Yes - MHL Compatible: Yes - RS-232C: 1 - PC (1-15 pin D-sub): 1 Total HDMI input (s) 4 - RF (antenna / Cable): 1 - component Video Input (s): 1 - composite Video Input (s): 2 - audio Input (s): 4 - audio Output (s): 1 - digital audio output: optical-Mic /		
ROOM MANAGEMENT SOFTWARE NETSUPPORT FUNCTIONS: Display screens all connected equipment represented as small screens on Administrator • Full screen exponent others collaborative teams • Allow display a specific application from the main computer in a window on the other computers • Perform Remote Control teams of collaborators equipment • Prevent data to / from USB devices and CD / DVD and create new network drive units are copied. • Lock Mouse and keyboard to one, a group or all collaborators equipment • Turn off all equipment from the administrator • Conduct surveys to conduct different types of questions with yes-no type answers, True-False, 1-2-3, etc. And collect the results of responses in percentages. • Perform	1	EA - each



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# EMBASSY OF THE UNITED STATES

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	Control Internet Web pages authorized or Prohibited and show the current page being visited by employees. • Restriction to specific pages in a Web site and function of "safe search" preventing the display of inappropriate content search engines. • Direct Internet browsing from the computer administrator making the fence opening pages, are opened in collaborative teams and that can not be directed to another site until an administrator authorizes it. • Allow Control of programs or applications they are working on other computers • Creation of working Groups • Assign teams as Group Leaders permit these to use some of the functions of the administrator. • Transmit and Show Videos • Conversation (Chat) text • Perform automatic monitoring screens employees with a period of time set by the administrator to move from one screen to the next • Remote Launch applications, makes the administrator can open programs on stations for students, eg. Word, Excel, Power Point and others. • Perform file transfers from the computer administrator to reviewers or vice versa or from the computer of an employee to another. • Record the activity being done on the computer that is being monitored • Record the activity undertaken on the administrator computer including the voice of this to her after or show it to students. • Warn when a computer is disconnected from the control system. • Arrange the location of the icons of the collaborators on the screen as the actual layout of their seats in the hall • Fully integrated digital board that provides administrator and partner participation. • Automatic creation of working groups based on function result Snapshot Survey. • Attendance records of employees to request Personalized information, Print and save the results and use the information during class. • Total control of printer usage in Room • Support for Windows.		
,	INTERACTIVE DIGITAL LECTERN 23.6 "FEATURESStructure: Wireframe collrolled .22 - Coating Electrostatic painting - Connection ports using a connector box with protective cover and electronic opening it to Chassis: RCA IN, OUT RCA, VGA, RJ45 DATA IN, HDMIProcessing unitSuggested reference: CPU Intel ® Core ™ I5-3230m OS Windows 8Chipset: Intel ® HM77 ExpressMemory: 4 GB DDR3 1333/1600 * 2	5	EA - each



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March 13, 2015

SODIMM slots / - Max. 8GBGraphics: Intel ® Graphics HG 4000Panel Resolution: 23.6 "LED Backlight LCD Panel (1920 \* 1080 Full HD)Touch panel: 10-Point TouchHDD: 2.5 "1TB 5400RPM SATAIII / 2.5"Optical Drive: DVD Super Multi / Blu-rayAudio 2 x 5W with Creative Sound Blaster  $^{\text{TM}}$  FilmWireless: 802.11 b / g / n WiFi LAN 10/100/1000 x 14 USB 2.0: USB 3.0 port 2 (including Super Charger x 1) Card Reader 3 in 1 (SD, MMC, MS) HDMI: 1, Mic-in / Headphone-out: 1Keyboard / Mouse WirelessWebcam: 2M pixels Full HDAC Adapter 120WDimensions: (WxDxH) 583.28 x 424.55 x 32.95mmMICROPHONEIndividual: Electrostatic Condenser MicrophoneDirectivity: UnidirectionalFrequency Response: 50Hz-16kHzSensitivity: -40dB  $\pm$  3dB (0dB = 1V / Pa at 1 kHz)Maximum SPL: 130 dB (at 1 kHz  $\leq$  1% THD)Signal to noise ratio:> 60 dBLow attenuation frequency: 80 Hz (-6 dB / octave)Equivalent noise level:  $\leq$  24 dB AOutput Impedance: 200 $\Omega$   $\pm$  30% (at 1 kHz)Phantom Power: Power 9-52V



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8	SERVER: Suggested reference:HP ProLiant Gen8 DL320e v2 SATA. SpecificationsLFF Processor Intel® Xeon® Quad-Core E3-1220v3 - 3.1GHz, 8MB L3 Cache, 4GB RAM, Windows Svr Std 2012 x64 Spanish ROKDual-Port Gigabit plate, disk bays Hot-Plug, iLO Management Engine Standard, Growth Supports for a processor (1 socket, up to 4 cores) Chipset / Intel FSB C222. Family E3-1200v3 / 80 Watts Processor, Memory Standard / Maximum RAM Standard 4GB (1x4GB) Maximum 32 GB UDIMM processors. Supports only UDIMM. Standard controller has standard B120i / Zero Memory.Supports RAID 0/1/1 + 0 (SATA only). Maximum capacity of standard discs: 8TB SATA Hot-Plug (2 x 4TB SAS or SATA LFF), with optional disks. Optional Maximum: 8TB SAS Hot-Plug (2 x 4TB SAS or SATA LFF) adding the respective additional SAS controller.Slot 2 PCI-Express expansion slots standard: A PCle 3.0 x16 (x8 speed) and a PCle 3.0 x8 (x4 speed) RED Controller Two 1Gb ports - HP 332i. Full Duplex 1Gb RJ45 with support for 10/100/1000 speeds Mb / s, Video External Ports: 1 RJ-45 Network: 2, iLO 4: 1 (dedicated), USB 2.0: 5 (2 front, 2 rear, 1 optional internal), USB 3.0: 2, 1 internal SD Slot.Source of power and cooling, removable Standard 300 Watts not hot.Three fans are not removable hot, not redundant. Warranty 1 year parts, 1 year labor on site, 3 years warranty for SAS, 1 year warranty for SATA drives.Kid rackmount rails. Two (2) HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Memory Kit Low Voltage (compatible with ML350E,)One (1) HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive (COMPATIBLE ML350E, DL 360 / DL 380 SERIES GEN8 E. One (1) HP 9.5mm SATA DVD RW DL 360 Jb Kit / DL320 GENERATION UNIT 8 DVD RW DL 360e FOR GEN 80ne (1) independent monitor 19 "LEDRACK CONNECTION Cabinet Size 19 "security door with glass, internal ventilation system with double fan and internal multi-take 6 outputs pole isolated land, height 1 m. 48-port switch. 48 R1-45 ports 10/100/1000 autonegotiation (IEEE 802.3 Type 10Base-T, IEEE 802.3u 100BASE	1	EA - each
9	SOUND AMPLIFICATION SYSTEM. Features: AmplifierInput types: 5 Channel input (TV, CD / DVD, Tuner, MP3 / AUX)Microphone Input: 2 InputsLimiter: input signal limiterAudio Control: Volume microphone Echo Control low and high controlMaster Volume ControlOutput Channels: 5 Channel SurroundWorking Frequency: 25Hz to 22KHzOutput Power: 50W RMS, 150W PeakMicrophone Headset: VHF, Reach 40mSpeakers Structure: ABS - Power: 50W - Routes: 2 - Woofer: 5 Inches - Twiter: 2.5 Inches	6	EA - each



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10	WIRELESS AUDIO CONFERENCE SYSTEM. Ability to incorporate a system of microphones to 50 units, five microphones can intervene simultaneously. Approximate Battery Duration 8 hours during the speech and about 30 hours while idle, operation distance up to 100 meters, with the best conditions and 60 meters under normal conditions. The system integrates a locking function to ensure no unwanted interventions, the perfect performance with the best chips and components are presented.  WIRELESS HOME UNIT:  Management UHF740MHz ~ 790MHz frequency  DC Input voltage: DC12V, 800mA  S / N> 105dB  T.H.D <0.5%  Frequency Response 60Hz ~ 16KHz  Dimensions: 2U  WIRELESS MICROPHONE UNITS  Management UHF740MHz ~ 790MHz frequency  FM modulation mode  Gooseneck length 400mm  4.5 v power supply  Frequency Response 60Hz ~ 16KHz  Dimensions (mm): 165x123x55	1	EA - each
11	MULTIFUNCTION PRINTER. Suggested reference: LASER JET PRO M127 FNPlug and Play: HP Smart InstallPantalla: 2 line LCD (text) Supported formats: Paper (plain, LaserJet), envelopes, transparencies, labels, postcards. Print Technology: Laser. Color Scanner: yes. Network ready: Standard (built-in Ethernet). Trays paper: 1. Capacity standard output for transparencies: Up to 75 sheets. Acoustic pressure emissions in stby mode (active, printing): 49 dB (A). First page out black (A4, ready): As fast as 9.5 seconds. Automatic paper sensor. Conexión PC: yes. Color fax: yes. Hardware scan resolution: 1200 x 1200 DPI. Scan files format: PDF; TIF; BMP; PNG; JPG.	2	EA - each
12	PRINTER / COPIER / SCANNER FOR EMAIL / USB / FOLDER DEVICES / SPEED TO 25-30-35 PPM MODEL WorkCentre 5335 Copier, Copy speed / print up to 35 standard ppm. Standard function: Copy. Optional: Fax, Printing, Scanner, operating cycle: Up 150,000 images / month , printing of the first page, copying as fast as 4 seconds (black and white). Maximum copy resolution 600 x 600 ppp. Copy Functions: Annotation, Auto reduction enlargement, Auto tray select, Auto Duplex, background suppression, book copying, Creating brochures, Build Job, Covers, Clear internal / external editing, electronic Presorting, Form overlay, Copy of ID, Inserts, mirror Image, originals of different sizes, N-up, Negative image, Page layout, Poster Mode, Set sample print labels. Printing Memory (standard) 1 GB . Hard drive unit 160 GB. Standard double-sided output. Maximum print resolution ND. Counting Auditron. Standard Safety functions: hard disk encryption 256 bit, overwrite Security, Tray finisher, Dual feedback options: 250 + 250-sheet tray, integrated Office finisher	1	EA - each



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	(Optional): 500-sheet, tray office Finisher LX (Optional): 2000-sheet tray, Stapler (Optional): 50-sheet.		
13	VIDEO CONFERENCE SYSTEM  H.323 and SIP standards - 64Kbps ~ 4Mbps - Red RJ45 LAN (10/100/1000) - Setting bandwidth Manual - Camera Pan / Tilt / Zoom - 2-megapixel CMOS sensor  16X optical zoom - ± 100 ° pan; ± 25 ° tilt -  Field of View (H): 61 ° - Field of View (V): 35 ° - Field of View (Diagonal): 67 ° -  HD1080p (1920 x 1080) - Resolutions People Video: HD720p (1280 x 720) - 480p (848 x 480) - CIF (352 x 288) - All resolutions at 30 fps - HD1080p (1920 x 1080) - WSXGA +  (1680 x 1050) - the content of video resolutions: SXGA (1280 x 1024) - WXGA (1280 x 800) - HD720p (1280 x 720) - XGA (1024 x 768) - output resolutions HD1080p (1920 x 1080) up to 30 fps - video Standards  H.264, H.263 +, H.263, H.261 (available with future firmware update) - video streams H.239 dual video inputs: EVC ecam Camera / VGA / DVI (HDMI) - video outputs HDMI / VGA - Standards G.711, G.722, G.728, G.722.1 / G.722.1 C license Polycom® - RED:  10/100/1000 Mbps - High efficiency Lost Packet Recovery (TM Helper - API support via Telnet Wake-on-LAN support (WOL) - Supports IPv4 and IPv6  Network Test - SECURITY: AES (Advanced Encryption Standard) Feature (128 bits)  Password protection for system configuration  Password protection for system management remote.	1	EA - each
14	<b>PAPER SHREDER:</b> 100 liters capacity - Cutout dimensions 0.8 x 15 mm - automatic start using photocells - Rewind and automatic stop in case of paper jam - Electronic door lock with magnetic switch.	3	EA - each



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15	PORTABLE VIDEO PROJECTOR. XGA Native Resolution (1024 x 768) Resolution up to UXGA (1600 x 1200) Brightness 2800 ANSI lumens Contrast Ratio: 3500: 1 (full on / full off) Type and life of lamp: 6000/5000 hours (Eco / Normal) 180W P-VIP Shooting range: 1.97 to 2.17 (distance / width) Projection distance: 3.94 ' to 39.4' (1.2 to 12m) Image Size (Diagonal) 30 " to 300" (0.76 to 7.62m) Aspect Ratio 4: 3 Native, 16: 9 and 16:10 Compatible Remote Control with Laser Pointer Audio Stereo speakers 2 watts 1.07 billion colors shown Compensation 115% ± 5% Loop through Monitor: Output Audio D-sub 15-pin VGA: Output Stereo Mini-Jack (functional both in normal situations and in standby mode) Compatibility computer with UXGA, WXGA, SXGA +, SXGA, XGA, SVGA, VGA Resized, VESA, PC and Macintosh Support video input: NTSC, PAL, SECAM, SDTV (480i), EDTV (480p), HDTV (720p,	2	EA - each
16	1080i / p) HDMI Inputs and outputs, two VGA inputs, VGA, S-Video, composite video input audio, audio output, RS-232 and USB Type B.  PROJECTION SCREEN WITH TRIPOD. Measures: 180cm x 180cm adjustable base in reforced aluminum, Matte White Surface, fire retardant material.	2	EA - each
17	ELECTRIC CURTAIN FOR PROJECTION - Dimensions: 180 x 180 CM - Fire Retardant Material - Matte White Surface - Compatible for video projectors, slide and overhead projectors RF Remote Control, IR and Wall Switch - Housing resistant metal dust - Viewing Angle 150 ° and visual gain of 1 - Upper and Chassis Thickness: 15CM Factory Defect Warranty: 1 year	2	EA - each



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18	TELEVISION CLOSED CIRCUIT CCTV (18 CAMERAS, DVR 1TERABYTE) 10 outdoor and 8 indoor, 18-channel CCTV DVR Kit (H. 264 10 Outdoor Waterproof and 8 Color Camera Indoor IR). Parameter DVR. Video Compression H.264. Video Input 18 Channels. Video Output 2 Channels, Another VGA video output, Audio Input / Output. Input Channel RCA 8 / Output channel BNC-1. Display Images per second NTSC: 480 fps @ D1 / PAL: 400 fps @ D1. Display Resolution NTSC: D1 (704 x 480) / PAL: D1 (704 X 576). Recording frame rate NTSC: 480fps @CIF / PAL: 400 fps @ CIF. Registration resolution PAL: CIF (352 x 288), NTSC: CIF (352 x 240) 10M / 100M. Network Protocol DHCP and TCP / UDP. Remote client software and browser IE Control PTZ RS-485. Input alarm / Output alarm 4 Input / 4 Output. Interface HDD SATA, support between 250 GB and 2 TB Normal. Synchronous Reproduction (Canal) 16 USB support / USB 2.0. Power source 12V CC. Dimensions (LxWxH) 335 x 250 x 50. Bullet camera settings. Image sensor Color CMOS 1/4 ". TV System PAL / NTSC. Effective CPíxeles NTSC: 512 (H) x 492 (V) - PAL: 512 (H) x 582 (V). Horizontal Resolution 420 lines of TV. Lents (mm) 6. Maximum distance IR (m) 20 ~ 25. Water Proof, Color CMOS dome Camera 1/4 ". TV monitor FHD LED TV 55" - RESOLUTION 1920 x 1080 FULL HDVIDEO INPUTS 1 HDMI, 1 USB - INTERNET - TV CABINET Cabinet type rack 19 "coll roled 20 gauge metal door with glass and key (must be adjusted to the CCVT measures)	1	EA - each
19	TELEPHONE APPARATUS  Analogous, 3-line display, Memory Caller ID numbers, For desktop or wall mounting, Automatic redial, 20 phone numbers to dial buttons touch, Setting Tone or Pulse	7	EA - each
20	TELEVISOR 47 "3D SMART Key Features Screen LED TV - Smart TV 3D / Smart TV / 3D / Basic - Screen Size (inch) 47 "-119 cm - Resolution (Lines) 1920 x 1080 - Resolution (Quality) full HD - Micro Pixel Control (Local Dimming) - type backlight unit DIRECT - Relationship Dynamics Clarity in Motion (MCI) 700 - Speed of response (HZ) 200	2	EA - each
21	IP TELEPHONE COMMUTATOR. Converged platform, application integration (server less) - Monitoring and Remote Management - Open Protocols - Advanced Telephony Features - maximum 108 extensions and 96 trunks - telephones (IP-PT) 64, 64 SIP extensions, telephones (SLT) 36 - digital Telephones (DPT) -DXDP 36 - direct station selector console (DSS) - Voice Processor System (VPS) - dimensions 430mm x 130mm x 340 mm - weight 8 kg.	1	EA - each
22	<b>SOFTWARE</b> : full license, office home & business 2013 32/64, latam spanish dvd boxed product, must include word, excel, power point, one note, outlook 2013.	55	EA - each
23	INTERNET WORKING DEVICE. The Contractor shall quote for supply and install of two (2) data switch unit as following futures: 24 UTP port (10/100/1000 Mbps), power over Ethernet, layer 2, manageable via Web, similar solution to Cisco Series 2960 reference and model WS-C2960S-24TD-L but with PoE.	2	EA - each



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	The Contractor shall include the 2X10G cards and the cabling for the interface connection.  The system configuration is done under NAS-COR instructions and coordination with Colombian NAVY. The Contractor shall supply, install and configure 2 new switches.		
24	TELECOMUNICATION CLOSET (TC).  The Contractor shall quote for supply and installation of a telecommunication closet. The new unit. To be provided shall have the following features: dimensions of 85"height, 23"weidth and 23" depth; metallic, painted with electrostatic painting, built in cold rolled caliber BWG No. 16-14, ventilation mesh front door, vented panels, two fans on top. The TC shall have a grounding barrage which shall be connected to the master barrage by using an insulated conductor THHN/THWN AWG No. 8. The metallic raceway system shall be bounded by using an insulated conductor THHN/THWN AWG No. 8, which shall be tied to the TC's grounding bar. The Contractor shall supply and install the following items as part of the TC solution:  - Two (2) power strip units, each one shall have TVSS class A with current interruption of 12KA, EMI/RFI filter, 8 duplex outputs 120VAC/15A, manufactured by a certified RETIE vendor.  - Cabling organizers, both vertical and horizontal.  - Two fans for cooling purposes, they will be placed on top of the rack  - The Existing UPS units shall feed each of the power strips to be installed.	1	EA - each
25	<b>TRANSPORTATION-INSTALATION-TRAINING:</b> All equipment and systems shall be transported and installed in the building of the Maritime Training Academy of the Colombian Navy in Cartagena and must be in full operating capacity with the server and all equipment. The contractor shall include a two days training for twenty people of COLNAV's Coast Guard about the operation and maintenance of the equipment.	1	EA - each